

KONSTANTINOV, B.P., akademik, red.; ALYAB'YEV, A.F., red.; POPOVA,
S.M., tekhn. red.

[Theory of plasma] Diagnostika plazmy; sbornik statei. Mo-
skva, Gosatomizdat, 1963. 301 p. (MIRA 16:12)
(Plasma (Ionized gases))

STEPANOV, Aleksandr Vasil'yevich, prof., doktor fiziko-matem.
nauk; KONSTANTINOV, B.P., akademik, red.; LEPIN, A.E.,
red.; SHERNUSHENKO, T.A., tekhn. red.

[Future of metalworking] Budushchee metalloobrabotki. Le-
ningrad, Lenizdat, 1963. 129 p. (MIRA 16:12)
(Founding)

KONSTANTINOV, B.P.; TROSHIN, V.P.

Electroosmotic movement of highly concentrated LiCl solutions. Zhur.prikl.
khim. 36 no.2:447-449 F '63. (MIRA 16:3)
(Lithium chloride) (Electroosmosis)

KONSTANTINOV, B.P.; TROSHIN, V.P.

Determination of the kinetic hydration numbers of Li^+ ions in highly concentrated LiCl solutions. Zhur.prikl.khim. 36 no.2:449-451 F '63.
(Lithium chloride) (MIRA 16:3)

(Hydration)

S/020/63/148/005/021/029
B190/B102

AUTHORS: Konstantinov, B. P., Academician, Oshurkova, O. V.
TITLE: Express microanalysis of chemical elements by the method
of the moving interfaces
PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 5, 1963,
1110-1113

TEXT: The method of the moving interfaces was checked as to its applicability in analytic chemistry. The experimental conditions are such that $C_1/n_1 = C_2/n_2$, C_1, C_2 being the concentrations of the two electrolytes, n_1 and n_2 the migration numbers of the non-common ions. One of the electrolyte contains ions of higher mobility. When a separation tube is used and the non-common ions are monovalent, C_2/C_1
 $= b \cdot \exp(-\frac{u_1 - u_2}{u_1} \frac{e}{kT} \frac{vx}{u_2})$, where b is a constant, u_1 and u_2 are the mobilities of the non-common ions, v is the velocity of the interface and

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Express microanalysis of chemical ...

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analysis. The least amount of substance contained in a 0.1-mm tube per interface width depends on the indicator concentration and on Z of the substance. It is usually 10^{-7} - 10^{-8} g, but 10^{-9} g for certain elements. The duration of the analysis depends on the ion mobilities, the field strength and the quantity of mixture, and varies between some minutes and several hours. The interface positions are determined from the differences in the refractive indices, the resistivities or the temperatures, the first method being most exact. The authors have constructed an apparatus in which they studied the motion of a great many of cations and anions. There are 3 figures.

ASSOCIATION: Fiziko-tekhnicheskii institut im. A.F. Ioffe Akademii nauk SSSR (Physico-technical Institute imeni A.F. Ioffe of the Academy of Sciences USSR)

SUBMITTED: July 2, 1962

Card 3/3

KOCHERGIN, Konstantin Alekseyevich; KONSTANTINOV, B.P., akademik,
red.; BORSHCHEVSKAYA, S.I., red.

[New welding processes] Novye protsessy svarki. Leningrad,
Lenizdat, 1964. 122 p. (MIRA 18:2)

ROZENTAL'NOV, B.P.; FIKS, V.B.

Isotope separation by the ionic mobility method. Zhur. fiz. khim.
38 no.6:1647-1651 Je '64. (MIRA 18:3)

1. Fiziko-tekhnicheskii institut imeni Ioffe AN SSSR.

KONSTANTINOV, B.P.; FIKS, V.B.

Separation of isotopes by the method of ionic mobilities. Zhur.fiz.
Khim. 38 no.8:1904-1908 Ag '64. (MIRA 23:2)

1. Fiziko-tekhnicheskii institut AN SSSR imeni A.P. Ioffe.

KONSTANTINOV, B.P.; FIKS, V.B.

Speparation of isotopes by the ion mobility method. Part 3.
Zhur. fiz. khim. 38 no.9:2255-2257 S '64. (MIRA 17:12)

1. Fiziko-tekhnicheskii institut imeni Ioffe, AN SSSR.

ACCESSION NR: AP4031172

S/0056/64/046/004/1470/1472

AUTHOR: Konstantinov, B. P.; Kocharov, G. Ye.

TITLE: Interaction between ultrahigh energy cosmic rays and neutrinos in the universe

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1470-1472

TOPIC TAGS: cosmic ray, neutrino, nuclear reaction, neutrino concentration, neutrino energy density

ABSTRACT: It is shown that the interaction between cosmic ray particles with energies larger than 10^{20} eV per nucleon and neutrinos may be offset by the possible enormous concentration of neutrinos in the universe, so that the nuclear interactions with the neutrinos must be taken into account in addition to the interactions with hydrogen and thermal photons. The possible values of the neutrino concentrations are first estimated, and the effect of the interaction of the cosmic rays with neutrinos is then compared with that of the nuclear reactions with hydrogen and thermal photons. It is shown, for example, that for maximum neutrino density, the lifetime of iron nuclei against reactions with neutrinos is $< 10^{12}$ years, whereas for minimum density the lifetime is $\sim 10^{24}$ years. The corresponding values for

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ACCESSION NR: AP4041138

8/0020/64/156/004/0763/0765

AUTHOR: Abagyan, S. A.; Subashiyev, V. K.; Konstantinov, B. P.

TITLE: Structure of the conduction band in gallium phosphide

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1964, 763-765

TOPIC TAGS: gallium phosphide conduction band, semiconductor, forbidden band, absorption edge, conductivity band structure

ABSTRACT: Since the structure of gallium phosphide bands is not yet well known, the authors undertook detailed measurements and analysis of the absorption edge in the region from 2 to 2.75 ev. The transmission measurements were made on specimens of 5 to 200 μ thick, obtained either by natural growth, or by cutting and polishing. The absorption was measured with the IR-10 spectrophotometer. In calculating the absorption coefficient α , the multiple reflection was taken into consideration. The frequency dependence of α agrees with the theoretically calculated for indirect permitted transitions. The width of the forbidden band was found (at room temperature) to be 2.21 ± 0.01 ev. The absorption edge can be explained by two indirect and one direct transition. The authors are grateful to

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ACCESSION NR: AP4041143

8/0020/64/156/004/0781/0784

AUTHOR: Kocharov, G. Ye.; Konstantinov, B. P.

TITLE: Proton-proton cycle and solar neutrinos

SOURCE: AN SSSR. Doklady*, v.156, no. 4, 1964, 781-784

TOPIC TAGS: solar proton proton cycle, neutrino detection, neutrino astrophysics, star energy production

ABSTRACT: The author discusses the possibilities of detecting solar neutrinos resulting from the two cycles which might be responsible for the energy production in the sun. Of these two, the proton-proton cycle may produce neutrino of 13.6 Mev (by B^8 decay). If the nucleus Li^4 exists, its decay may produce a 18.9 Mev neutrino. The author calculates the possible concentrations of the intermediate products of the reactions, and their life-times, for assumed solar temperatures from 5 to 30×10^6 K. These data are needed for the estimation of the neutrino flux to be expected. The attempt by R. Davis (Bull. Am. Phys. Soc. 4, 4, 217, 1959) of detecting solar neutrinos and its negative result is discussed. Orig. art. has: 2 figures and 2 tables.

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L 14292-65 EWA(h)/EMG(k)/EMP(k)/EWT(L)/T PI-4/P1-4/Pz-6/Feb IJP(c) AT
ACCESSION NR: AP4049127 S/0020/64/159/001/0049/0052

AUTHOR: Konstantinov, B. P.; Grinberg, A. A.; Kastal'skiy, A. A.;
Ry*vkin, S. M.

TITLE: Generation of ultrasound in the p-n junction of a nonpiezo-
electric material

SOURCE: AN SSSR. Doklady*, v. 159, no. 1, 1964, 49-52, and bottom
half of insert facing p.44

TOPIC TAGS: ultrasound, ultrasound generation, semiconductor
ultrasonics, p-n junction ultrasonics

ABSTRACT: Proceeding from the work of D. L. White (IRE, TVE-9, 1962)
on the generation of ultrasound in a GaAs-to-metal transition layer,
the authors investigated analytically and experimentally the possibil-
ities of ultrasound generation in a usual p-n junction or in any
barrier layer of nonpiezoelectric materials. The generating mechanism
in this case is the attraction between the donors and the acceptors
of the space charge zone. An outside potential applied to the junction

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ACCESSION NR: AP4049127

will effect a change in the thickness of the space charge and thus change the force of attraction, which in turn determines the stress within the crystal. Resonance conditions are investigated in the case of a high bias potential applied in the barrier direction and a low sinusoidal exciting voltage, the diode being acoustically loaded from the side of the n-region by a continuous medium of the same material as the junction, while its p-region is bounded by vacuum. Expressions for the amplitude and the acoustical energy at resonance are derived and applied to real conditions where the regions of a p-n junction adjacent to the space charge are finite and the energy is radiated into a medium with an acoustic resistance differing from that of the junction material. Three limiting cases are then considered: the case of a symmetric system with equal p and n regions, equal acceptor and donor concentrations, and the thickness of the p and n regions larger than the thickness of the acceptor space charge; the case of the acceptor space charge being much thinner than that of the donors and both being much thinner than the p and n regions; and a similar case modified by the p region being much thinner than the n region of the junction. The second is considered

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ACCESSION NR: AP4049127

to be the most favorable theoretically as well as experimentally. Calculations show that in a Ge junction in air, with the donor concentration of 10^{17} per cm^3 being much lower than that of the acceptors, at a sinusoidal voltage of 3 v, a bias of 30 v, the p and n regions having a total thickness of 0.5 cm, the pressures developing in the specimen reach the order of 3 kg/cm^2 , and the radiated power is about $0.4 \times 10^{-5} (2n + 1)^2 \text{ W/cm}^2$ ($n = 1, 2, \dots$). In an experimental test, the amplitude of the oscillations proved to be proportional to the sinusoidal voltage, and the relative lattice displacement in the direction perpendicular to the p and n contact plane reached a value of the order of 10^{-3} at a sinusoidal voltage of 3 v and a bias of 15 v. Due to internal losses, however, the experimental width of the resonance region greatly exceeded the theoretical value, which caused the amplitude to drop by about 3 orders of magnitude below the theoretical. Orig. art. has: 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe, Akademii nauk, SSSR (Physicotechnical Institute, Academy of Sciences SSSR)

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L 14292-65

ACCESSION NR: AF4049127

SUBMITTED: 03Aug64

ENCL: 00

SUB CODE: SS

NO REF SOV: 000

OTHER: 001

ATD PRESS: 3136

KONSTANTINOV, B.P.; BAKULIN, Ye.A. (Leningrad)

Separation of chlorine isotopes in aqueous solutions of LiCl , NaCl ,
and HCl . Zhur. fiz. khim. 39 no.3:592-596 Mr '65. (MIRA 18:7)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR.

FEDORENKO, N.P., akademik; SUKACHEV, V.N., akademik; KARAKHEYEV, K.K.; FRANK, G.M.; KONSTANTINOV, B.P., akademik; ASTAUROV, B.L.; YEFIMOV, A.N.; SHUMILOVSKIY, N.N.; ISHLINSKIY, A.Yu., akademik; GERASIMOV, I.P., akademik; KAZARNOVSKIY, I.A.; BYKHOVSKIY, B.Ye., akademik; ZHEBRACK, A.R., akademik

Discussion of the annual report. Vest.AN SSSR 35 no.3:95-112
Mr '65. (MIRA 18:4)

1. Prezident AN Kirgizskoy SSR (for Karakeyev).
2. Chleny-korrespondenty AN SSSR (for Frank, Astaurov, Yefimov, Kazarnovskiy).
3. AN Kirgizskoy SSR (for Shumilovskiy).
4. AN BSSR (for Zhebrak).

L 3459-66 EWT(1)/EPA(s)-2/EWT(m)/ETC/ENG(m)/EPA(w)-2/T/EWP(t)/EWP(b)/EWA(m)-2/EWA(c)
ACCESSION NR: AP5017205 LJP(c) RDW/JD/JG UR/0020/65/162/006/1269/1270

AUTHORS: Ivanov-Omskiy, V. I.; Kolomiyets, B. T.; Ogorodnikov, V. K.; Smekalova, K. P.; Konstantinov, B. P.

TITLE: Electron mobility in HgTe

SOURCE: AN SSSR. Doklady, v. 162, no. 6, 1965, 1269-1270

TOPIC TAGS: mercury compound, telluride, Hall coefficient, semiconductor carrier, electron mobility, magnetoresistance

ABSTRACT: In view of the difficulty of determining the type of conductivity of HgTe from measurements of the Hall effect, owing to the larger ratio of the electron mobility to the hole mobility (~100), the authors investigated single-crystal samples of HgTe, prepared by zone melting with subsequent annealing in mercury vapor, over a large range of temperatures. From the temperature dependence of the Hall coefficient it is concluded that HgTe is a semiconductor of the n-type, whose carrier mobility has a temperature dependence typical of the degenerate electron gas in semiconductors and in metals. The electron

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L 3459-66

ACCESSION NR: AP5017205

mobility is quite high at all temperatures, reaching $200,000 \text{ cm}^2/\text{V-sec}$.
The Hall coefficient exhibits a strong dependence on the magnetic field intensity. This is attributed either to inhomogeneity to the crystal or to the complicated energy spectrum of the electrons in the HgTe. The magnetoresistance of HgTe is characterized by curves having a continuously varying slope and exhibiting no saturation. This report was presented by B. P. Konstantinov. Orig. art. has: 2 figures

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute AN SSSR)

SUBMITTED: 16Dec64

ENCL: 00

SUB CODE: NP

NR REF SOV: 003

OTHER: 005

BVK

Card 2/2

KONSTANTINOV, B.P., akademik; KOCHAROV, G.Ye.

Astrophysical phenomena and radiocarbon. Dokl. AN SSSR 165 no.1:63-64
N '65. (MIRA 18:10)

1. Fiziko-tehnicheskly institut Im. A.F.Ioffe AN SSSR.

2

KONSTANTINOV, B.P.

Serafim Nikolaevich Zhurkov, 1905- ; on his 60th birthday.
Usp. fiz. nauk 87 no.2:367-372 0 '65. (MIRA 18:11)

KONSTANTINOV, B.P.; KAYMAKOV, Ye.A.; BASARGIN, I.V.

Determination of the relative difference in the mobility of
isotope ions of uranyl. Zhur. fiz. khim. 39 no.4:836-839
Ap '65. (MIRA 19:1)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR. Submitted
June 19, 1963.

KONSTANTINOV, B.P.; BAKULIN, Ye. A.

Separation of isotopes $Mg(24,26)2+$ and $Cu(63-65)2+$ in aqueous solutions of $MgCl_2$ and $CuCl_2$.

1. Fiziko-tekhnicheskiy institut imeni F.F. Ioffe AN SSSR. Submitted June 19, 1963.

L 31041-66 EWT(1)/EWT(m)/EWA(h) GW

ACC NR: AP5027836

SOURCE CODE: UR/0020/65/165/001/0063/0064

AUTHOR: Konstantinov, B. P. (Academician); Kocharov, G. Ye.

ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences SSSR (Fiziko-tekhnicheskii institut Akademii Nauk SSSR)

TITLE: Astrophysical phenomena and radiocarbon

SOURCE: AN SSSR. Doklady, v. 165, no. 1, 1965, 63-64

TOPIC TAGS: supernova, stellar radiation, gamma radiation, carbon

ABSTRACT: Although the determination of the causes of variation in the C^{14} content of annual rings of trees constitutes a complex problem, a comparison of the radiocarbon activity of such rings with known astronomical phenomena may turn out to be a very promising method of investigation. As an example, the authors cite the increase in C^{14} content in the year 1700 and around 1050. It is known that the supernova Cassiopeia A exploded in 1700, and that the supernova in the Crab nebula exploded in 1054. If the composition of the electromagnetic radiation emitted by the explosion of a supernova contains gamma quanta with energies of tens of MeV, then it can generate C^{14} atoms in the earth's atmosphere by the reactions $O^{16}(\gamma, n)O^{15}$, $19F(\gamma, n)19F$, $N^{14}(n, p)C^{14}$; $N^{14}(\gamma, n)N^{13}$, $N^{14}(n, p)C^{14}$; $O^{16}(\gamma, 2p)C^{14}$. An estimate shows that the probability of such formation of a C^{14} isotope by a gamma quantum of several tens of MeV is 1%. An estimate of the amount of energy emitted by the explosion of a supernova in the form of hard gamma radiation was made assuming that a 1% change in the activity of C^{14} could be measured. For Cassiopeia A (about 1700), the value obtained is 10^{51} ergs; for the Crab nebula and Kepler

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UDC: 537.591.5

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ACC NR: AP6027800 SOURCE CODE: UR/0126/66/022/001/C157/0158

AUTHOR: Konstantinov, B. P.; Zimkin, I. N.; Stepanov, M. I;
Shestopalov, L. M. 4/
B

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR (Fiziko-
tekhnicheskii institut AN SSSR)

TITLE: Hardening of steel surface by wire explosion

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 1, 1966, 157-158

TOPIC TAGS: metal ~~steel~~ hardening, ~~steel~~ surface hardening, wire, ~~explosion~~,
~~explosive hardening~~ steel

ABSTRACT: Copper or steel wire, 0.38—0.4 mm in diameter and 40—50 mm long, placed 10 mm above the face of a cylindrical U8A steel specimen was exploded by a current pulse produced by the discharge of a capacitor. As a result of this explosion, the surface microhardness increased from the original 170—200 kg/mm² to 950—1200 kg/mm². Although the average thickness of the hardened layer was 20—30 μ, it was uniform and varied from 0 to 60 μ. X-ray diffraction patterns showed that the surface layer contained up to 70% austenite, the rest being mostly ferrite with no significant quantity of martensite. It could be that the metal surface was decarbonized, or the ferrite had no time to

Cord 1/2

UDC: 621.785.5

L 33403-66 EWT(m)/ETC(f)/T IJP(c) DS
 ACC NR: AP6015318 (A; N) SOURCE CODE: UR/0057/66/036/005/0942/0957
 AUTHOR: Konstantinov, B. P.; Oshurkova, O. V. 27
 ORG: Physicotechnical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-tekhniches-
kiy institut AN SSSR)
 TITLE: An instrument for analyzing electrolytic solutions by ion mobilities
 SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 5, 1966, 942-957
 TOPIC TAGS: quantitative analysis, microchemical analysis, electrochemical analysis,
 ion mobility, electrolyte
 ABSTRACT: The paper describes an instrument for rapid microanalysis of electrolytic
 solutions containing several species of anions but only one species of cations, or
 several species of cations but only one species of anions. The analysis is effected
 by confining the unknown solution in a tube between end solutions each containing only
 one ion species of the polarity being analyzed and passing a current through the solu-
 tion. Under these conditions, and if the mobilities of the ions in the known end
 solutions are suitably chosen, a steady state will be approached in which the unknown
 solution mixture is separated into a number of pure solutions in accord with the mo-
 bilities of the several ions, and the boundaries between the different solutions will
 move with a constant velocity along the tube. The concentrations of the pure solu-
 tions in the steady state condition will satisfy relations given by P.Kohlrausch
 Card 1/3 UDC: 541.133

L 33403-66

ACC NR: AP6015318

(Ann. Phys., 62, 209, 1897). In the present instrument the motion of the boundaries in the steady state is compensated by applying a hydrodynamic flow of equal and opposite velocity; this not only facilitates measurement in the steady state, but also obviates the necessity of using the excessively long tube that would otherwise be required for establishment of the steady state. The boundaries between the different solutions in the steady state are not absolutely sharp, owing to the effects of diffusion, the radial temperature gradient that is established in the tube as a result of the evolution of Joule heat, and the fact that the motion of the boundary is overcompensated near the axis of the tube and undercompensated near the wall by the hydrodynamic counterflow because of the parabolic velocity profile of Poiseuille flow. These effects are calculated quantitatively and it is found that adequate sharpness of the boundaries can be achieved only by using capillary tubes of very small diameter. This accounts for the unsatisfactory results obtained by L.G.Longsworth (National Bureau of Standards, Circular, 524, 58, 1953) and J.Kendall (Nature, 150, 3793, 136, 1942) in earlier attempts to employ the differences between ion mobilities for the separation of ions. In the present instrument an approximately 20 cm long capillary tube was employed, the internal diameter of which was about 0.1 mm. The instrument is described in some detail and techniques are discussed for fabricating and filling the capillaries. The boundaries between the different solutions in the steady state were located by an optical technique depending on the differences between the refractive indices of the different solutions. The instrument has been successfully tested by analysis of 28 different anions and 42 different cations. Results of test analyses of

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L 44792-66 EWT(1)

ACC NR: AP6031276

SOURCE CODE: UR/0057/66/036/009/1718/1721

AUTHOR: Konstantinov, B. P.; Zaydel', A. N.; Konstantinov, V. B.; Ostrovskiy, Yu. I.

ORG: Physico-technical Institute im. A. F. Ioffe AN SSSR, Leningrad (Fiziko-
tekhnicheskoy institut AN SSSR)

49
B

TITLE: Holography. Experimental techniques and the resolution of method

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 9, 1966, 1718-1721

TOPIC TAGS: holography, hologram, laser photography, camera/Zenit-3m camera

ABSTRACT: Experimental holograms of half-tone and two- and three-dimensional objects were made by means of standard equipment assembled on an ²⁸OSK-2 optical bench. A Zenit-3m camera was used with a 35-mm Mikrat-600 emulsion, whose maximum response was at 6400 Å. Resolution was not less than 1420 lines/mm. The quality of reconstructed images was enhanced by suppression of nonaxial modes. The angular resolution of 5 x 5 mm holograms was 3×10^{-4} radians for high-contrast reconstruction. Apparent quality degradation was observed in holograms which were 10 x 10 mm and larger. The degradation was attributed to effects caused by film bending and emulsion surface inhomogeneities. Orig. art. has: 3 figures. [YK]

SUB CODE: 14/20/ SUBM DATE: 27Apr66/ OTH REF: 002/ ATD PRESS: 5080

Card 1/1 blg

L 21506-66 EWT(1)/EWA(d) GW

ACC NR: AP6007736

SOURCE CODE: UR/0293/66/004/001/0066/0073

AUTHOR: Konstantinov, B. P.; Bredov, M. M.; Belyayevskiy, A. I.; Sokolov, I. A.

ORG: nono

TITLE: Possible antimatter nature of micrometeors

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 1, 1966, 66-73

TOPIC TAGS: antiparticle, gamma flux, gamma radiation, gamma background, meteor trail, meteor tracking, meteor stream, meteor detection, comet, scintillation counter, radar meteor observation, cosmic radiation, cosmic ray measurement, neutron radiation

ABSTRACT: An experiment was conducted to verify whether meteor showers are the product of cometary disintegration, in which case they would, according to one hypothesis, consist of antimatter dust particles. Theoretically, it appears possible to identify the radiation produced by the disintegration of such antidust particles coming into contact with particles of the earth's atmosphere. It is suggested that the major meteor showers may be formed by the disintegration of comets; the connection between comets and meteor

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UDC: 551.590.25

L 21506-66

ACC NR: AP6007736

showers, therefore, is directly related to the question of the nature of meteors. At this point it should be noted that the problem under discussion does not involve meteors of noncometary origin reaching the earth, the number of which does not change during periods of meteor showers.

The problem is approached on the assumption that comets are macroscopic bodies consisting of antimatter and coming to us from other solar systems of our galaxy which may consist entirely of antimatter. From this, a plausible theory can be derived to explain the extrasolar-system origin of comets. A comet's capture by the sun could, according to calculations, result from a small change in the comet's total energy, adequate to transfer it from a hyperbolic to an elliptical class, due to the annihilation of protons in the solar wind on the comet's surface.

Of the primary and secondary radiation produced during annihilation, the most satisfactory for detecting the investigated phenomenon are hard gamma rays (with an energy exceeding 70 Mev), which can be recorded at a great distance from the point of annihilation. Due to the radiation length in air of gamma rays at this energy level, measurements of average

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ACC NR: AP6007736

gamma radiation flux at sufficiently high altitudes permit several maximum values to be derived for the quantity of antimatter which may enter the earth's atmosphere. The intensity of gamma radiation at an altitude having a residual atmospheric density of about $100-10 \text{ g/m}^2$ was found to be approximately $10^{-1} \text{ cm}^{-2} \cdot \text{sec}^{-1} \cdot \text{sterad}^{-1}$. Taking the above maximum antinucleon-flux-intensity value, and considering the earth's orbital velocity to be $\sim 3 \times 10^6 \text{ cm/sec}$, the concentration of antinucleons in space is estimated at about 10^{-7} cm^{-3} .

Measurements of average gamma-radiation intensity at altitudes of 25—30 km during periods of varying meteor activity have shown that variation in the intensity of gamma radiation during a period of maximum meteor shower activity exceeds by not more than 50% the radiation intensity in the absence of a shower. This finding permits maximum values for the mass of antimeteors to be estimated. The number of meteors falling on a given area of earth per unit of time during the heaviest showers is about $10^{-16}-10^{-15} \text{ cm}^2 \cdot \text{sec}^{-1}$. Taking, as earlier, the maximum gamma-radiation intensity due to annihilation at $10^{-1} \text{ cm}^{-2} \cdot \text{sec}^{-1} \cdot \text{sterad}^{-1}$,

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ACC NR: AP6007736

with its variation not exceeding this value during a period of meteor-shower activity, a maximum value for the mass of an antimeteor was found to be about $10^{-9} - 10^{-10}$ g. If such meteors are antiparticles, their mass of 10^{-9} g would release a total energy equivalent to that of a conventional meteor with a mass of 10^{-1} g. The task of registering the annihilation radiation from an individual meteor should be fairly difficult, considering that annihilation would occur at an altitude of about 100 km.

Along with measurements of average intensity at altitudes of 25—30 km, experiments were conducted to detect radiation at altitudes of 13—18 km produced by an individual meteor entering the atmosphere. Gamma rays and neutrons were registered by scintillation counters and proportional gaseous-boron counters; meteors were detected by a radar technique at the 4-m wavelength. The directivity pattern of the radar station, the selection of meteors' radar echoes by distance, and the area in which to expose radiation detectors were coordinated in such a way that it was possible to assume that a given meteor had entered the atmosphere approximately above the detector.

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L 21506-66

ACC NR: AP6007736

A number of control experiments were used to reveal any systematic errors which could possibly have occurred. Despite this, and since the experiments were conducted using only one method, the possibility remains that unaccounted-for systematic errors were made; however, actual reasons for their appearance could not be found at that time. With the formation of meteor trails at an altitude of about 100 km, an increase in the intensity of hard gamma radiation and neutrons, amounting to approximately 2% of the background or ~ 1 impulse per meteor, was noted at altitudes of 13—18 km.

Among the possible physical origins of the observed effect, besides the explanation related to the investigated hypothesis, may be suggested the presence of background modulation of cosmic radiation during the entry of a conventional meteor into the earth's atmosphere. Theoretically, such modulation can take place either because of a change in the density of the upper atmospheric layer or because of the influence of the magnetic pole on primary cosmic radiation arising during the formation of a meteor trail.

Card 5/6

Card 6/6 dla

ACC NR: AP6033534

SOURCE CODE: UR/0176/66/011/004/0455/0462

AUTHOR: Konstantinov, B. P.; Kotousov, L. S.

ORG: Polytechnic Institute, Leningrad (Politekhnikheskiy institut)

TITLE: Calculation of multistage thermal diffusion in a field of rotation forces

SOURCE: Inzhenerno-fizicheskii zhurnal, v. 11, no. 4, 1966, 455-462

TOPIC TAGS: thermal diffusion, thermal diffusion separation, isotope separation equipment, *hydrodynamics*

ABSTRACT: The authors analyze the theory underlying the operation of a thermal centrifugal column and determine some of its optimal parameters as well as the settling time. The need for such a calculation is dictated by the fact that apparatus of this type, first constructed by M. Farber and W. E. J. Libby (J. Chem. Phys. v. 8, 965, 1940) can be useful for concentration of an isotope from a sample containing only several grams of matter. Its operation is based on maintaining the gap between the hot and cold walls small (on the order of fractions of a millimeter), and replacing the gravitational force by rotational force. Hydrodynamic calculations of the motion of a gas or liquid inside a hollow rotating disc whose walls are at different temperatures are used to derive the equations of the centrifugal separation column. The optimal circulation necessary to obtain a maximum isotope separation is determined. These constitute the conditions for the minimum HETP/(height equivalent of theoretical plate) value at any radius. It is shown that a minimal HETP can be obtained by a

UDC: 621.039.341.6

Card 1/2

ACC NR: AP6033534

slight alteration of the gap. The enrichment of radio carbon based on the isotopic mixture $C^{12},^{14}H_4$ is considered by way of an example. It is shown that by using a thermocentrifugal column it is possible to attain optimal HETP by reducing the gas pressure. The equilibrium time reduces to approximately 1 hr at 5 atm and the optimal rotation speed is 10 rps, the column separation factor is $10^2 - 10^3$ for a thermal diffusion factor 0.01 - 0.02, a relative temperature difference of approximately 1°, and a gap 0.3 - 0.5 mm at a radius of approximately 50 cm. The gap should be accurate within 10 μ . Orig. art. has: 2 figures and 30 formulas.

SUB CODE: 20/8/ SUBM DATE: 15Jun66/ OTH REF: 004

Card 2/2

or times greater than obtained by "Proton-1." "Proton-3" is a real space laboratory weighing more than 12 tons. The two principal objectives of this

Card 1/2

UDC: none

4929 1792

ACC NR: AN7008945

station are: furtherment of the investigations begun by its two predecessors for control purposes and new studies for detection of particles with a fractional charge. The satellite has new complex apparatus for detecting fundamental elementary particles, "quarks," in cosmic rays. On "Proton-3" there has been approximately a tenfold increase of the effective area of the apparatus for study of superheavy nuclei in primary cosmic rays. [JPRS: 37,397]

Card 2/2

GERR, Feliks Grigor'yevich; KONSTANTINOV, Boris Vasil'yevich,
nauchn. red.; BOROVIKOVA, N., red.

[Shallow, reinforced concrete wells with porous concrete
filters] Shakhtnye zhelezobetonnye kolodtsy s fil'trami
iz poristogo betona. Alma-Ata, Kazsel'khozgiz, 1963. 11 p.
(MIRA 17:10)

KONSTANTINOV B. V.
USSR / Meadow Cultivation

L

Abs Jour: Ref Zhur-Biol., Vol 13, 1953, 58461

Author : Nagornyy, Yu. M., Konstantinov, B. V.

Inst : Betpak Dala Experimental Station on Cattle Husbandry

Title : Organization of the Feeding Area and the Irrigation Along Cattle Driving Routes of the Betpak-Dala Desert

Orig Pub: Tr. Betpak-Dalinsk. kompleks. opytn. st. zhivotnovodstva. Alma-Ata, Kazakhsk. gos. izd-vo, 1957, 45-82

Abstract: A system for utilizing underground waters along cattle driving routes is recommended. Full water supply of the Betpak-Dala desert can be guaranteed by the simultaneous utilization of subterranean and

Card 1/2

14

pastures of the Betpak-Dala desert, and of the southern zone of the Sary-Arka steppe. This irrigation system is recommended by the local experimental station for cattle husbandry.

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000824410008-

Card 1/1

KONSTANTINOV, D.

One more affiliated factory radio club. p.7.
(RADIO I TELEVIZIIA, Vol. 6, no. 3, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

Konstantinov, D

107-8-25/62

AUTHOR: Konstantinov, D., President of the Agitation and Propaganda
Section (Gara Krishin, Bulgaria).

TITLE: At Our Bulgarian Friends (U nashikh bolgarskikh druzey)
A Plant Radio Club (Radioklub na zavode).

PERIODICAL: Radio, 1957, #8, p 16, col 1-3 (USSR)

ABSTRACT: In February 1957 an amateur radio club was created at the
State Cellulose Plant imeni Stefan Kiradzhiev, with the
assistance of the Soviet Union.

This club is a branch of the Plovdiv District "DOSO" (Voluntary
Organization of Cooperation and Defense) Radio Club.

The plant workers, engineers and technicians, participate in
the activity of the short wave, ultra-short wave and designing
sections, and are designing their own short wave station.

A great number of workers are taking radiotechnical courses,
in which the engineers and technicians of the plant are serving
as instructors.

Card 1/2

The management of the plant, provided a room, the necessary

KONSTANTINOV, D.

13

- Sofia, Farmatsiya, Vol 11, No 4, July-Aug 1961
1. "Need for Medical Education Along with Distribution of Drugs" R. YONOV, pp 1-5.
 2. "Comparative Pharmacologic Study of Some Phenothiazines" I. DOLIN (Department of Pharmacology, Medical Faculty in Sofia / Director: Prof. P. KROKOV /) pp 1-15.
 3. "Antitubercular Effect of the Isonicotinoyl Hydrate Hydrates. Part 4. 5-nitro-2-furfuryl-isonicotinoyl Hydrate (Hizun)" A. KOLAROVA and N. KIRILOV, Pharmacy Research Institute, Sofia / Director: L. ZHELYAZKOV /) pp 17-23.
 4. "Synthesis of Some Simple Structural Analogs of Papaverine" M. LITV (Affiliation as 33); pp 25-29.
 5. "Regarding the Synthesis of Piperazine" At. GECHEV (Affiliation as 33); pp 31-36.
 6. "A Method for Obtaining Rutin from Sophora japonica" St. GIBRY (Affiliation as 33); pp 37-40.
 7. "Regarding the -Atelle for Every Gram, Every Penny, Every Inch and Every Minute in Pharmaceutical Economics" St. GIBRY; pp 40-43.
 8. "Prescription by Paracelsus" V. VASILY and D. KONSTANTINOV; pp 44-45.

1. Katedra po farmakologiya pri VIL.
2. Nauchno-issledovatel'skiy institut po farmatsiya.

— 1/1 —

KONSTANTINOV, Dechko

New regulations for the rewards of designers and modelmakers. Trud
tsemi 4 no.2:58-61 '62.

~~KONSTANTINOV, D.~~, podpolkovnik

Innovators of fraternal armies. Starsh.-serzh. no.9:34-35 S
'62. (MIRA 15:11)

1. Bolgarskaya Narodnaya armiya.
(Communist countries--Armed forces)

ORLINOV, V.; ZARKOVA, L.; KONSTANTINOV, E.

Gesium thermionic converter with tungsten tathode at high cathode temperature. Doklady BAN 16 no.5:493-496 '63.

1. Institute of Electronics, Bulgarian Academy of Sciences.
Submitted by Corresponding Member E. Djakov [Dzhakov, E.].

DJAKOV, E. [Dzhakov, E.]; ORLINOV, V.; ZARKOVA, L.; KONSTANTINOV, E.

Low-frequency oscillations in thermionic converter with cesium vapors. Doklady BAN 16 no.1:23-26 '63.

1. Physical Institute at the Bulgarian Academy of Sciences.

DJAKOV, E. [Dzhakov, E.]; ORLINOV, V.; ZARKOVA, L.; KONSTANTINOV, E.

High-frequency oscillations in a thermionic converter under the low pressure of cesium vapors. Doklady BAN 15 no.7: 707-710 '62.

1. Institute of Physics at the Bulgarian Academy of Sciences.

L 52646-65 EPA(s)-2/EPF(c)/EEC(k)-2/EPF(n)-2/ENG(m)/EPA(w)-2/T/ENP(t)/EPA(bb)-2/
ENP(b)/EWA(h) Pz-6/Pab-10/Pr-4/Pt-7/Peb/Pu-4 IJP(c) RWH/JHB/JD/TI/WW/JG/AT
ACCESSION NR: AP5013550 BU/0011/65/018/001/0015/0018

AUTHOR: Orlinov, V.; Stefanov, B.; Zarkova, L.; Konstantinov, E.

TITLE: High-pressure cesium thermionic converter with a tungsten cathode

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 1, 1965, 15-18

TOPIC TAGS: high pressure thermionic converter, cesium thermionic converter,
thermionic converter, cesium vapor, cesium pressure, low voltage arc, arc mode

ABSTRACT: A brief description is given of three series of experiments with a cesium thermionic converter using a tungsten wire cathode, an interelectrode spacing of 0.3 mm, and a cylindrical nickel anode. At $T_c = 1950K$ and $t_{Cs} = 260C$, the maximum power w_{max} was 2.77 w/cm^2 at $U_{\eta} = 1.10 \text{ v}$, and the efficiency η was 9.35%. When voltage was increased, w_{max} and η increased, respectively, from 4 w/cm^2 and 9.7% to 7 w/cm^2 and 16.6%. At $T_c = 2000K$ and $t_{Cs} = 340C$, w_{max} was 16 w/cm^2 and η was 24%. In this latter case, the characteristic was typical of volume ionization, and a comparison with theoretical data revealed that the value of the emf was determined by plasma processes, the electrode properties having a negligible influence. The experiments were made with the use of an improved version of a previously described converter (Orlinov, V., L. Zarkova, and E. Konstantinov, Compt. Rend. Acad. Bulg.

Card 1/2

L 52646-65

ACCESSION NR: AP5013550

Sci, 16, 5, 1963, 493). The low specific power and efficiency of the original model were attributed to a large electrode spacing (2.5—3 mm) and low cesium pressure (below 0.6 mm Hg). The authors hope to obtain better results by further increasing the cesium temperature and optimizing the temperature of the cathode. Orig. art. has: 4 figures. (2L]

ASSOCIATION: Institute of Electronics, Bulgarian Academy of Science

SUBMITTED: 00

ENCL: 00

SUB CODE: EC

NO REF SOV: 002

OTHER: 003

ATD PRESS: 4012

Card *llc*
2/2

KONSTANTINOV, Emil, inzh.

Problems of reconstructing clamp bending mechanism in Bulgarian stapling machines for packaging. Durvomebel prom 7 no.6:12-15 N-D '64.

1. Zamfir Popov State Industrial Enterprise, Berkovitsa.

KONSTANTINOV, Emil, inzh.

Some possibilities of increasing the productivity of Bulgarian sewing machines for packing. Durvomebel prom 7 no.2/3:14-18 Mr-Je '64.

1. "Zamfir Popov" Stat Industrial Enterprise, Berkovitsa.

KONSTANTINOV, F.

N/5
101.11
.K823

Basis and superstructure. Moscow, Foreign Languages Publishing House, 1955.

50 p.

Translated from the Russian.

Bibliographical footnotes.

MATVEYEV, M.A., doktor tekhn.nauk; IVAKHIN, S.I., kand.tekhn.nauk;
KONSTANTINOV, E.G., inzh.; GAYDASH, B.I., inzh.

Use of pegmatites of the Aleksandrovsk and Krasnovsk deposits
in the production of high voltage insulators. Stek. 1 ker. 22
no.1:30-33 Ja '65. (MIRA 18:7)

1. Moskovskiy ordena Lenina khimikotekhnologicheskii institut im.
D.I.Mendeleyeva (for Matveyev). 2. Tsentral'naya nauchno-issledo-
vatel'skaya laboratoriya tresta Armset' (for Gaydash).

ARZUMANYAN, A.A., akademik; BERG, A.I., akademik; ZHUKOV, Ye.M., akademik;
 SEMENOV, N.M., akademik; VINOGRADOV, V.V., akademik; FRANTSEV, Yu.P.;
 SHCHERBAKOV, D.I., akademik; ANISIMOV, I.I.; GATOVSKIY, L.M.;
 IOVCHUK, M.T.; FEDOSEYEV, P.N., akademik; ROMASHKIN, P.S.; KONSTANTINOV,
 F.V.; MITIN, M.B., akademik; YELYUTIN, V.P.; PLOTNIKOV, K.N.;
 PRUDENSKIY, G.A.; YUDIN, P.F., akademik; RYBAKOV, B.A., akademik;
 KONSTANTINOV, B.P., akademik; KHVOSTOV, V.M.; KEDROV, B.M.; MARKOV,
 A.A.; BAISHEV, S.B., akademik; ALEKSEYEV, M.N., prof.; SKAZKIN, S.D.,
 akademik; ALEKSANDROV, A.D.; POSPELOV, P.N., akademik

Discussion of L.F. Il'ichev's rreport. Vest. AN SSSR 32 no.12:19-50
 D '62. (MIRA 15:12)

1. Chleny-korrespondenty AN SSSR (for Aleksandrov, Frantsev,
 Anisimov, Gatovskiy, Iovchuk, Romashkin, Konstantinov, Yelyutin,
 Plotnikov, Prudenskiy, Khvostov, Kedrov, Markov). 2. AN Kazakhskoy
 SSR (for Baishev).

(Research)

KONSTANTINOV, F. I.

Bulgaria on the road to socialism. Ind. 2., ispr. 1 dop. Moskva Gospolitizdat, 1955. 382 p.

KONSTANTINOV, E.

"Device for Establishing Short Circuits In Electric Coils."

p. 43 (Radio I Televiziia, Vol. 7, No. 6, 1958, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 11,
Nov. 1958

KONSTANTINOV, F. V.

O Dvizhushchikh Silakh Razvitiya Sotsialisticheskogo Obshchestva Moscow, 1951
31 p. A lecture in pamphlet form on the development of Socialist Society,
including the economic foundation of Soviet Society, predominance of policy
over economics in the transition period under Socialist conditions, and
the moral-political unity, friendship of nations, and Soviet patriotism as motive
powers of the Soviet Society; published by "Pravda".

KONSTANTINOV, F V

N/5
782

Zakon obyazatel'nogo sootvetstviya proizvodstvennykh otnosheniy kharakteru
proizvoditel'nykh sil (Law of the obligatory correspondence of relations
of production to the character of productive forces. Moskva) Gospolitizdat,
1953.
45 P.

KONSTANTINOV, V. V.-Doctor of Philosophical Sciences, presented a report, "Marxism-Leninism on the Role of Popular Masses and of Personality in History" at a scientific session in the USSR Acad. of Sciences dedicated to the 50th. anniversary of the Communist Party of the Soviet Union. The session was held on October 19, 1953.
SO: Pravda (USSR), October 20 1953, Unclassified

KONSTANTIN V. F.V.

Die Rolle Der Volksmassen In Der Geschichte. Berlin, Dietz, 1954
36 P.

Translation For The Russian, Rol' Narodnykh Mass V Istorii,
Bibliographical Footnotes.

SO: N/5
805.4
.K81

POSPELOV, P.N., akademik; SMIRNOV, V.S.; LAVRENT'YEV, M.A., akademik;
GAFUROV, B.G.; KEDROV, B.M.; DUBROVSKIY, S.M., doktor istor.nauk;
KONSTANTINOV, F.V.

Discussion of the report. Vest. AN SSSR 33 no.8:29-39 Ag '63.
(MIRA 16:8)

1. Chleny-korrespondenty AN SSSR (for Smirnov, Gafurov, Kedrov,
Konstantinov).

(No subject heading)

KONSTANTINOV, F.V., akademik

Interaction of nature and society and modern geography.
Izv AN SSSR Ser. geog. no.4: 12-22 '64 (MIRA 17:8)

1. Institut filosofii AN SSSR.

CONSTANTINOV, I.V., Kharkov

Nature, society and the present-day geography. *Priruch. 93*
no. 822-9 '64.

(USSR 17 9)

KONSTANTINOV, G.

"Cattle breeding on the collective farm in Iliskov, Novi Pazar County" (p. 53)

KOOPERATIVNO ZEMEDELIE

(Ministerstvo na zemedeliето) Sofiya Vol 2 No 10/11 1953

SO: East European Accessions List Vol 2 No 7 Aug 1954

KONSTANTINOV, G., arkhitektor.

Problems of economy in construction with sawed limestone. Stroi.
mat. 3 no.12:23-24 D '57. (MIRA 11:2)
(Limestone) (Building, Stone)

EFTIMOV, B.; KONSTANTINOV, G.; ALEXIEV, D. [Aleksiev, D.]; AMOV, B.

~~Changes~~ in heredity and in some physiological and biochemical indices under the effect of radioactive iodine. Doklady BAN 16 no.1:89-92 '63.

1. Submitted by Corresponding Member K. Bratanov.

ALEKSEYEVA, A.; ANOKHIN, G.; BEZRUKOVA, M.; GONCHARENKO, O.;
GRIGOR'YEVA, L.; KONSTANTINOV, G.; KAPITONOV, L.; YAKUB, V.;
SOBINOV, M.G., red.; AVRAMENKO, I., red.

[When trolls are sleeping; a story on how we became ac-
quainted with Norway] Kogda spiat trolli; rasskaz o tom, kak
my poznaomilis' s Norvegiei. Moskva, Molodaia gvardiia,
1964. 108 p. (MIRA 17:7)

L 9932-65 EWT(d) Pg-4 IJF(c) AFM(dp)/ASD(d)/ESD(dp)/AFETR/ASD(a)-5/AFWL /
 ACCESSION NR: AT4047140 AFTC(b) MLK S/0000/64/000/000/0101/0109

AUTHOR: Chudov, L. A. (Moscow); Konstantinov, G. A. (Moscow); Lin, Yun-nien^B
 (Moscow)

TITLE: The problem of the probable estimates of round-off errors in the numerical
 solution of differential equations. 116

SOURCE: Chislenny*ye metody* resheniya differentsial'ny*kh i integral'ny*kh uravneniy
 i kvadrurny*ye formuly* (Numerical methods of solving differential and integral equations
 and quadrature formulas); sbornik statey. Moscow, Izd-vo Nauka, 1964, 101-109

TOPIC TAGS: differential equation, ordinary differential equation, Euler method numerical
 method, algorithm, iteration, normal distribution, round-off error

ABSTRACT: In solving ordinary differential equations by numerical iteration techniques,
 perhaps the most serious source of error is round-off errors created by approximations
 made in intermediate steps of an algorithm. The present paper examines the equation

$$y' = y$$

with the initial condition $y_0 = y(0)$. This is essentially a Cauchy problem. The method of

Card 1/2

L 9918-65

ACCESSION NR: AT4047140

Euler is applied for the numerical solution of the equation. The initial value y_0 is considered as a random variable with mean a_0 and spread σ_0^2 , distributed according to a normal distribution. The mean a_1 and spread σ_1^2 are then determined for the value y_1 obtained in the first repetition of the solution algorithm. The main result is to determine, as a function of a_0 , the probable round-off error of the algorithm, where the iterations are related by:

$$y_{n+1} = y_n + h y_n' \quad (n = 0, 1, \dots)$$

Numerical experiments support the validity of the probability distributions derived. Orig. art. has: 15 formulas and 4 tables.

ASSOCIATION: none

SUBMITTED: 14Sep63

ENCL: 00

SUB CODE: MA

NO REF SOV: 006

OTHER: 001

Copy 2, 2

KONSTANTINOV, G. F.

"The Oblast Hospital and Its Mission," Sov. Zdrav., No. 1, 1948.

Acad. Med. Sci., Moscow

KONSTANTINOV, G. F.

PA 41T67

USSR/Medicine - Medical Centers
Medicine - Social Medicine

Jan 1948

"Medical Services for the Rural Population in the
Fourth Stalin Five-Year Plan," G. F. Konstantinov,
Candidate Med Sci, 4 pp

"Fel'dsher i Akusherka" No 1

Medical Five-Year Plan calls for establishing medical
facilities up to prewar level, and improving the ser-
vices to rural communities. Author discusses some of
the methods which will be of direct benefit to rural
populations.

41T67

KONSTANTINOV, G. F.

PA 12/49T92

USSR/Medicine - Medicine, Rural
Medicine - Medicine, State

May 48

"Tenth Year Since the Publication of the Decree by
the Soviet of the People's Commissariat USSR;
'The Consolidation of Rural Medical Districts,'"
G. F. Konstantinov, Cand Med Sci, 2 3/4 pp

"Fel'dsher i Akusherka" No 5

Recalls rural medical situation in 1938. Stresses
significance of Decree. Summarizes results,
quoting figures showing increases in material and
personnel.

12/49T92

PA 15/49T93

USSR/Medicine - Public Health
Medicine - Medicine, Rural

Jul 48

"Rural Medical Districts in the Soviet Public Health System," G. F. Konstantinov, Deputy Head, Adm of Medical Prophylactic Aid to Rural Population, Ministry Pub Health USSR, 2½ pp

"Sov Med" No 7

Traces development of rural medical services in USSR. Table shows number of each type of institution in 1913, 1928, 1938, and plan figure for 1948.

15/49T93

PA 152T55

KONSTANTINOV, G. F.

USSR/Medicine - Public Health Jul/Aug 49
Hospitalization,
Rural

"First All-Union Conference on Medical Aid to
Rural Communities," G. F. Konstantinov, 3 pp

"Sov Zdrav" No 4

(Moscow, Apr. 1949)

Difference between this conference and last
All-Russian Conf in 1924 was that the problem
then was organizing rural medical aid while
now it is raising the standard of rural medical
aid comparable to that in cities. Reports by
Ministers of Pub Health USSR, RSFSR, and Ukrai-
nian SSR, chiefs of hospitals in various oblasts,

USSR/Medicine - Public Health (Contd) Jul/Aug 49

et al, gave statistics on increased number of special-
ists and hospital facilities, and analyzed successes
and failures in improving medical service in rural
communities.

152T55

KONSTANTINOV, G.F.

25190 Konstantinov, G. F. Zadachi Meditsinskiki Rabotnikov v Period Uborochnykh
Sel'skokhoz Yaystvennykh Rabot. Sov. Meditsina, 1949, No. 8, c.36-38

SO: Letopis' No. 33, 1949

KONSTANTINOV, G.F.

First data on organization of public health in rural communities. Sovet. zdavookhr. no.4:37-42 July-Aug. 1950.
(CLML 20:1)

1. Head of the Administration for the Rural Network of the Ministry of Public Health USSR.

KONSTANTINOV, G.F.
~~XXXXXXXXXXXXXXXXXXXX~~

Tasks of the middle medical personnel in rural areas in relation to
consolidation of collective farms. Med. sestra, Moskva no.4:3-5 Apr
1951. (CLML 20:7)

KONSTANTINOV, G. F.

KONSTANTINOV G. F.

Sel'skaya uchastkovaya bol'nitsa. [Rural district hospital]
Feldsher & akush. No. 4 Apr 51 p. 3-6.

NAI

KONSTANTINOV, G.V.; BYCHKOV, I.Ya.; KURYGIN, V.M., redaktor.

[Rural feldsher-midwife stations; work organization] Fel'dshersko-
akusherskii punkt na sele; organizatsiia raboty. Moskva, Gos.izd-vo
med. lit-ry, 1954. 121 p. (MLRA 7:12)
(Medicine, Rural)

Konstantinov, G. F.

USSR/Medicine - Literature, Feldsher-Midwife Post

FD-2194

Card 1/1 Pub 102-14/15

Author : Chumak, M. M., Candidate of Medical Sciences (Reviewer)

Title : Review of "Fel'dshersko-akusherskiy punkt na sele; organizatsiya raboty" (Feldsher-midwife post in a village; organization of work), by Konstantinov, G. F. and Bychkov, I. Ya., Medgiz, 1954, 125 pages.

Periodical : Sov. zdrav., 3, 60-62, May-June 1955

Abstract : Organization of feldsher-midwife posts in rural areas was prompted by the need for bringing medical aid closer to the people working in kolkhozes, sovkhoses, MTS, and field camps. This basic unit of rural health service, with its large army of feldshers and midwives on independent duty in remote rural areas, has long been looking forward to publication of a reference book suitable for that branch of medical service. This 125 page book was, therefore, well received by the medical community. The book contains an introduction and is divided into 16 chapters. Forty thousand copies of this book were printed.

Institution : —

Submitted : —

Konstantinov, G. F.

KONSTANTINOV, G.F., red.

[Public health in the U.S.S.R.; a statistical manual] Zdravookhra-
nenie v SSSR; statisticheskii spravochnik. Pod red. G.F.Konstan-
tinova. Moskva, Medgis, 1957. 178 p. (MIRA 11:2)
(PUBLIC HEALTH--STATISTICS)

KONSTANTINOV, G.F.

Training and distribution of physicians. Sov.zdrav. 16 no.4:19-28
Ap '57. (MLRA 10:8)

1. Nachal'nik otдела meditsinskoy statistiki Ministerstva zdavo-
okhraneniya SSSR

(PHYSICIANS, statistics,
world distribution (Rus))
(SCHOOLS, MEDICAL, statistics,
same)

KONSTANTINOV, G.F.

KONSTANTINOV, G.F.

Some facts about public health services in Czechoslovakia. Sov.
zdav. 16 no.9:62 S '57.
(CZECHOSLOVAKIA—PUBLIC HEALTH)

(MIRA 10:12)

KONSTANTINOV, G.F.
KONSTANTINOV, G.F.

Medical specialists in the Bulgarian People's Republic. Sov.zdrav.
16 no.11:55-57 N '57. (MIRA 11:1)
(PHYSICIANS, statist.
in Bulgaria (Rus))

BRUSHLINSKAYA, L.A.; KASSATSIYER, M.Ya.; MAZUR, M.M.; KONSTANTINOV,
G.F., red.; BRODSKIY, M.S., red.; GABERLAND, M.I., ~~red.~~ red.

[Statistics in a city hospital; a manual on records and analysis]
Statistika v gorodskoi bol'nitse; posobie po uchetu i analizu
raboty. Moskva, Gos. izd-vo med. lit-ry, 1948. 102 p. (MIRA 11:12)

1. Nachal'nik otдела meditsinskoy statistiki Ministerstva
zdravookhraneniya SSSR (for Konstantinov).
(HOSPITALS--ACCOUNTING)

KONSTANTINOV, G.F.

Basic achievements and problems in public health statistics.
Sov.sdrav. 17 no.7:17-22 J1 '58 (MIRA 11:8)

1. Nachal'nik Otdela meditsinskoy statistiki Ministerstva
sdravookhraneniya SSSR.

(SANITATION

sanitary statist., achievements & problems (Rus))
(STATISTICS,

same (Rus))

(PUBLIC HEALTH, statistics
in Russia (Rus))

(VITAL STATISTICS,
in Russia (Rus))

KONSTANTINOV, G.F.

Some public health indicators in the Mongolian People's Republic
in 1956. Sov.zdrav. 17 no.8:57-58 Ag '58 (MIRA 11:9)
(PUBLIC HEALTH,
in Mongolia (Rus))

BELETSKIY, G.N.; KONSTANTINOV, G.F.; MAYOROVA, Z.S.; MAYEVSKIY, V.I.; MAYSTRAKH,
K.V.; ROSTOTSKIY, I.B. (Moskva).

Basis of Soviet socialistic public health. Sov. zdav. 18 no.3:
22-28 '59.

(PUBLIC HEALTH

(MIRA 12:3)

in Russia (Rus))

KONSTANTINOV, G.F. (Moskva)

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